

WHAT THE RESEARCH TELLS US

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Baltimore, Maryland

United States of America



Panelists

- ***Robert I. Lerman***, Institute Fellow, Urban Institute
- ***Svetlana Darche***, Senior Research Associate, WestEd
- ***Maria Flynn***, Senior Vice President, Jobs for the Future
- ***Viktória Kis***, Project Manager, Work-based Learning in Vocational Education and Training, Directorate for Education and Skills, OCED
- ***Demetra Nightingale***, Chief Evaluation Officer, U.S. Department of Labor



History of Work-Based Learning

Robert I. Lerman, The Urban Institute



BETTER POLICIES FOR BETTER LIVES

Svetlana Darche

Sr. Research Assoc.

WestEd



Defining Work-Based Learning (WLB)

- An instructional strategy that prepares all students for success in postsecondary education and careers through direct engagement with industry and community professionals.
- Experiences intentionally designed to address learning outcomes that are difficult to achieve through classroom or standard project-based learning alone.



Outcomes Sought by WBL

- Understanding of career options and skills required
- Development of knowledge and skills
 - Technical knowledge and skills
 - Application of academic knowledge and skills
 - “21st Century” skills (e.g., problem-solving, communication, collaboration)
 - Social-emotional skills
 - Navigational skills



Work-Based Learning Continuum

Age 4

Adult

Career Awareness

Learning ABOUT work

Build awareness of the variety of careers available and the role of postsecondary education; broaden student options.

Career Exploration

Learning ABOUT work

Explore career options and post-secondary for the purpose of motivating students and to inform their decision making in high school and postsecondary education.

Career Preparation: Practicum and Internships

Learning THROUGH work

Apply learning through practical experience that develops knowledge and skills necessary for success in postsecondary education and careers.

Career Training

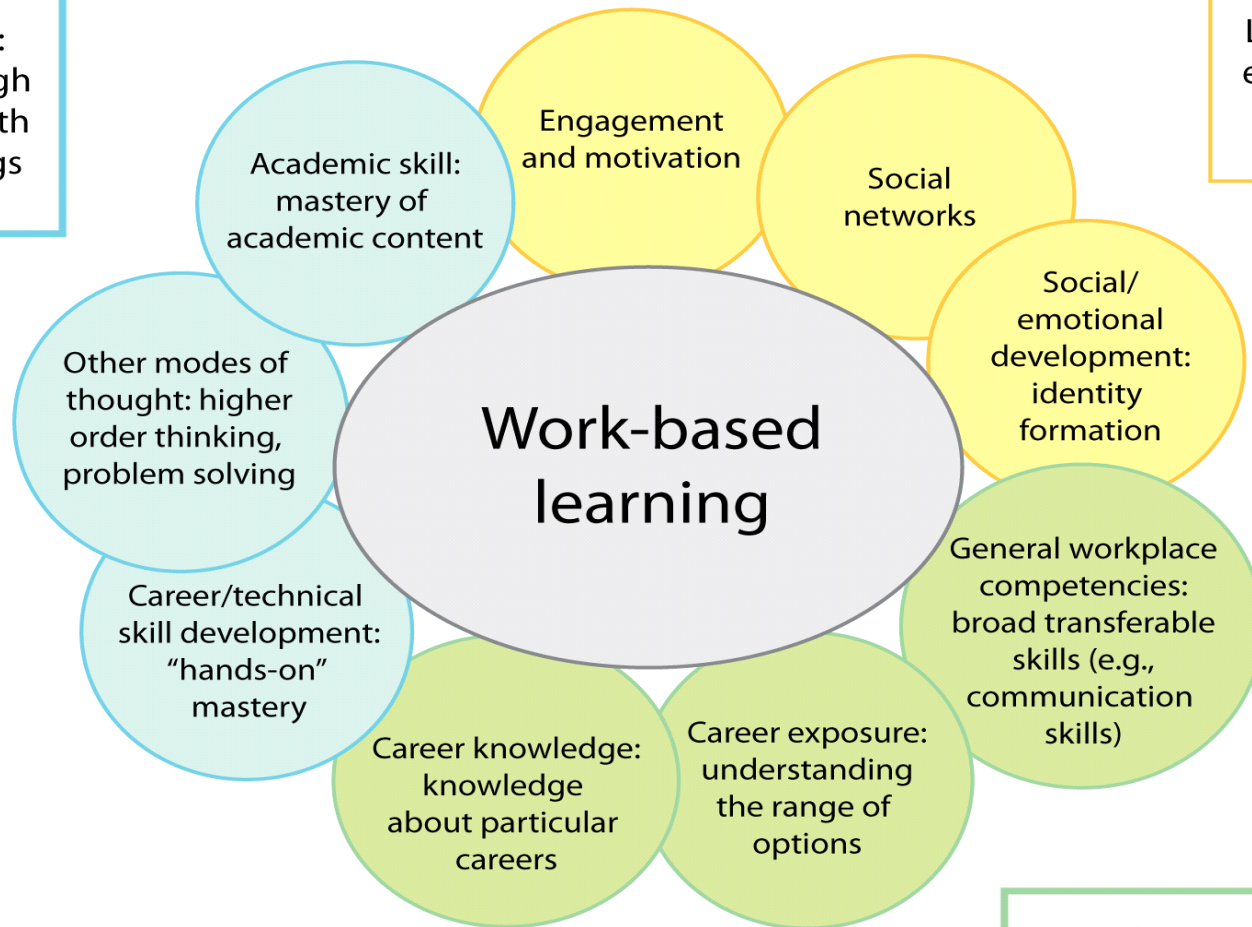
Learning FOR work

Train for employment and/or postsecondary education in a specific range of occupations.



Cognitive
Development:
Learning through
engagement with
ideas and things

Social/Emotional
Development:
Learning through
engagement with
people and self



Career
Development:
Learning through
engagement with
work processes
and places

Features of WBL

For all experiences

- Connection to classroom with focus on outcomes
- Direct, systematic employer and/or community input
- Authentic value and benefit to students beyond the classroom

For intensive career preparation-level experiences

- Depth of experience with opportunity to engage in CoP
- Production of goods/services with value to employers, clients, and communities beyond the classroom



Why a Purpose-Driven vs. Place-Based Definition?

In the 21st C., when we want to prepare ALL students for postsecondary education/training, careers, and life-long learning...

- To address learning outcomes that may be attained through varied experiences
- To explore options that can enable us to scale work-based learning and ensure equity of access
- Because the workplace is changing and new skills and modes of work are needed



New Model of WBL

- For all students — to apply classroom knowledge and develop essential career readiness skills not easily taught in classrooms
- Continuum of experiences provided over time
- Location determined by purposes and goals, including equity in access
- Structured learning component, with intentional learning goals and assessments, linked to both CTE and academic classes
- Supervisor as worksite mentor
- 360 degree view until focused training required



Making WBL Work for Disconnected Youth

Organisation for Economic
Co-operation and Development



In the US 4 out of 10 disconnected youth face difficulties with basic skills



England (UK)



Canada



United States



Germany



Australia



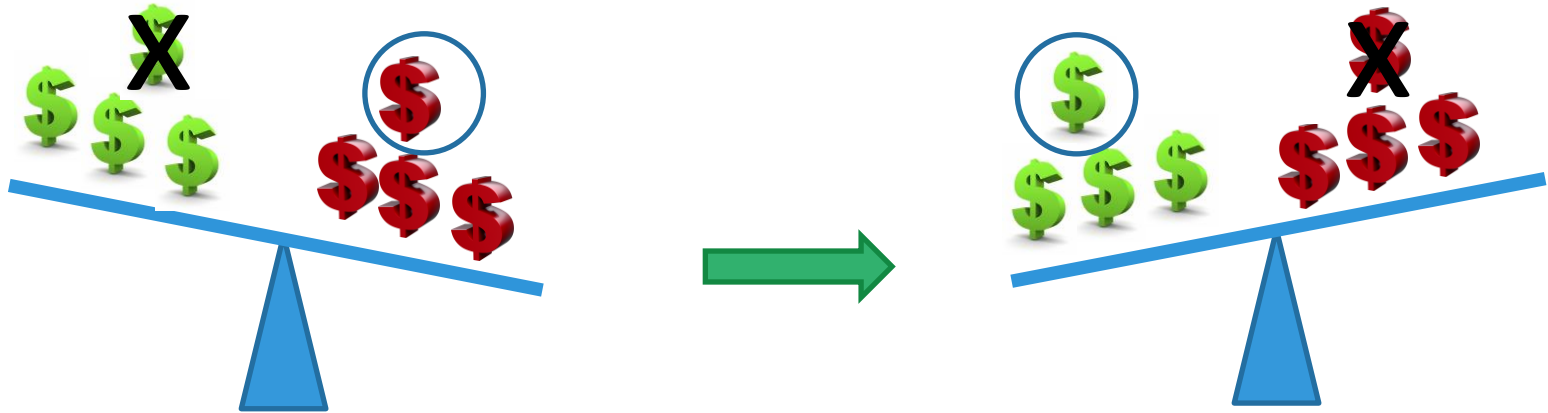
Finland



Japan



Three policy tools



- 1 Preparing youth for work-based learning
- 2 Supporting youth engaged in work-based learning
- 3 Targeted subsidies and tax breaks



Policy tool 1:

Preparing youth for work-based learning



The tool:

- Pre-apprenticeship type programs
- Common elements: literacy, numeracy, technical skills, career guidance

How should it help disconnected youth access to WBL?

- Better skills from the start → improved capacity to meaningfully contribute to productive work
- Better matching between trainees/apprentices and firms



Policy tool 2:

Supporting youth engaged in work-based learning



The tool:

Additional support offered to trainees/apprentices who need it



How should it help disconnected youth access to WBL?

Trainees/apprentices learn faster and contribute more to productive work



Policy tool 3:

Targeted subsidies and tax breaks



The tool:

Money given to firms who offer work-based learning opportunities to disconnected youth

How should it help disconnected youth access to WBL?

The costs of offering work-based learning are reduced





Which policy tool works (best)?



How to use them best?



Policy report
in late 2016



Evidence on Work-Based Training

Demetra Nightingale
Chief Evaluation Officer
U.S. Department of Labor



Research and Evaluation Evidence

General Findings

- The more closely training is related to a real job or occupation, the better the results for training participants.
- Most training in the U.S. is work-based and employer sponsored
 - Over a quarter of all workers report that they receive some formal job training from their employers, and
 - About 70 percent of firms indicate they offer some type of training to employees
- Firms tend to invest in higher level workers (e.g., management and mid-level workers)
- Government investment in lower-skilled workers expands work-based training



Benefits to Workers

Findings from evaluations

- OJT (e.g., 6-9 months subsidy of 50-60% of wages)
 - Increases employment over time, increases earnings
- Registered Apprenticeships
 - Increases lifetime earnings of an average of \$8,000 a year, and about \$200,000 in lifetime earnings
- Summer jobs for youth
 - Important source of income and positive engagement
 - Comprehensive models that mix work-place job with education, mentoring, and personal counseling have positive impact—Chicago study found large reduction in violent crime and arrests.



Benefits to Workers

Findings from evaluations

- Workplace-based literacy programs
 - Improved skills, attendance, and job performance
- Subsidized or Transitional jobs—evidence is more mixed, but it is an important model
 - Provides short-term income and work
 - For low-skilled workers, youth, new immigrants/refugees, formerly incarcerated and persons with barriers to employment, provides skills and work experience if the training and assignment is of high quality
 - The key to long-term success is to actually transition to a regular job—that is sometimes challenging
 - Some positive evidence on reducing recidivism among formerly incarcerated



Benefits to Employers

Findings from research

- Less research on employers and firms
- Firms benefit from workplace training—if the training is high quality.
 - Lower turnover
 - Higher productivity
 - Positive returns to shareholders
- Little research yet estimating Firms' Return on their Investment



Jobs for the Future

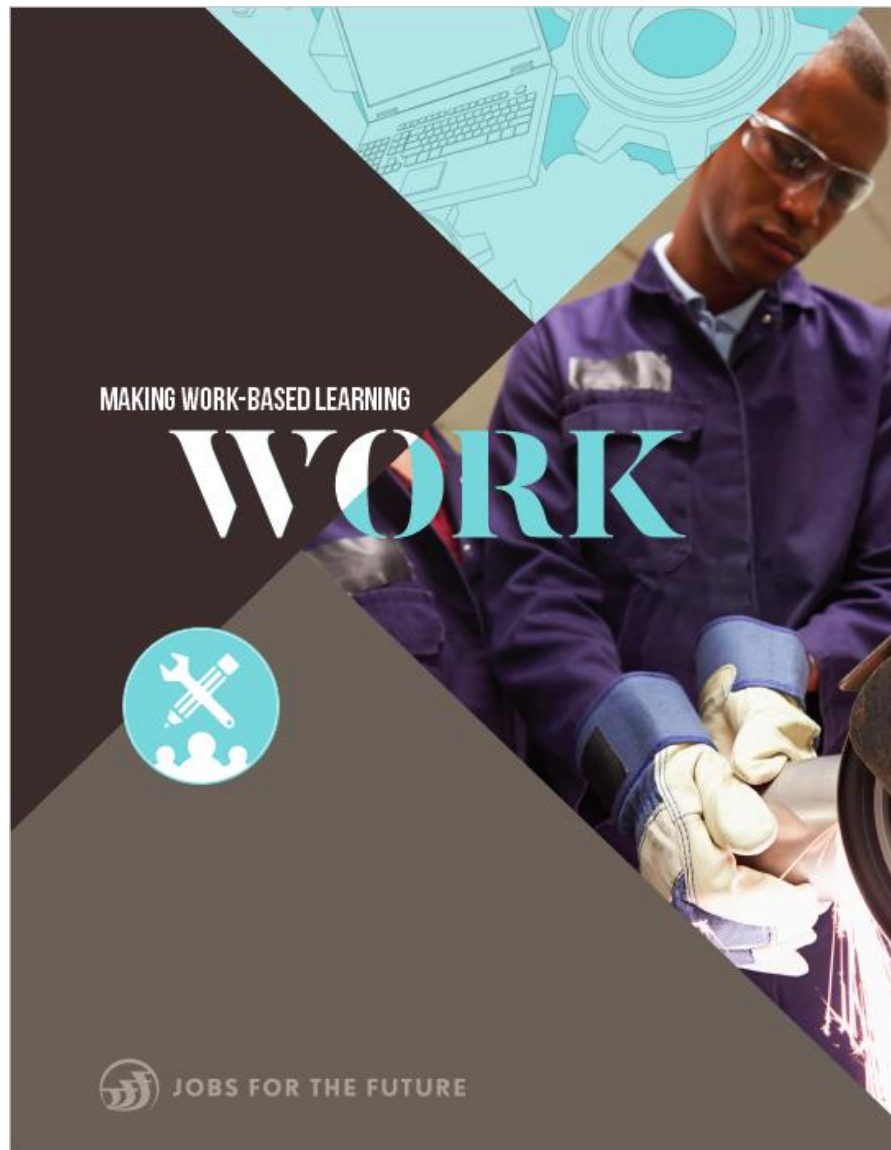
Maria Flynn



JOBS FOR THE FUTURE

NEW JFF PUBLICATION

Making Work-Based Learning Work



JFF's Work-Based Learning Models in Action:

- Showcases examples of different WBLs that incorporate one or more key principles
- Briefs currently available: Industrial Manufacturing Technician (IMT) Apprenticeship, Work-Based Courses
- Additional briefs coming soon



JOBS FOR THE FUTURE

WHAT IS WORK-BASED LEARNING?

CORE PURPOSES:

OCCURS IN WORKPLACES

HAS MEANINGFUL JOB TASKS

DEVELOPS SKILLS AND KNOWLEDGE

SUPPORTS CAREER ENTRY AND ADVANCEMENT

- Exposes participants to the world of work
 - Exposes participants to a career field
 - Strengthens academic learning
 - Enhances professional skills
 - Provides a temporary or permanent job



BENEFITS OF WBL

BENEFITS TO PARTICIPANTS



- Develop professional and career-track skills
- Gain real-world work experience
- Earn postsecondary credentials that match employer expectations and needs

BENEFITS TO EMPLOYERS

- Employees have the information and skills needed to make informed job and long-term career choices
- Reduced turnover
- Greater productivity
- Lower costs



THE NEED FOR EQUITY IN WBL



A lack of access to work-based learning limits the career prospects and economic mobility of millions of youth and adults, and prevents them from becoming part of the talent pipeline employers need to spur economic growth.

70% of employers offer some form of WBL to employees
\$177 BILLION spent by employers on training annually
58% spent on employees with a BA or higher
25% spent on employees with some college (sub-BA)
17% spent on employees with a high school diploma or less

OVERVIEW OF WBL MODELS

	INTERNSHIPS	CO-OPS	TRANSITIONAL JOBS	ON-THE-JOB TRAINING	APPRENTICESHIPS
POPULATION SERVED	Secondary, Postsecondary, Opportunity Youth, Recent Grads, Adults	Secondary, Postsecondary	Opportunity Youth, Individuals w/Barriers to Employment	Dislocated Workers, Low-Skilled Adults, Opportunity Youth	Opportunity Youth, Incumbent Workers, New-Career- Seekers
CORE PURPOSE	<ul style="list-style-type: none"> ➤ Exposure to career field, world of work ➤ Development of professional skills ➤ Academic learning ➤ Temporary job 	<ul style="list-style-type: none"> ➤ Academic learning ➤ Development of career-track skills ➤ Temporary job 	<ul style="list-style-type: none"> ➤ Exposure to world of work ➤ Development of professional skills ➤ Temporary job 	<ul style="list-style-type: none"> ➤ Development of career-track skills ➤ Permanent job 	<ul style="list-style-type: none"> ➤ Academic learning ➤ Development of career-track skills ➤ Permanent job

7 PRINCIPLES FOR EFFECTIVE WBL

Support entry and advancement
in a career track



Provide meaningful job
tasks that build career skills
and knowledge



Offer compensation



Identify target skills and
how gains will be validated



Reward skill development



Support college entry,
persistence, and completion



Provide comprehensive
student supports



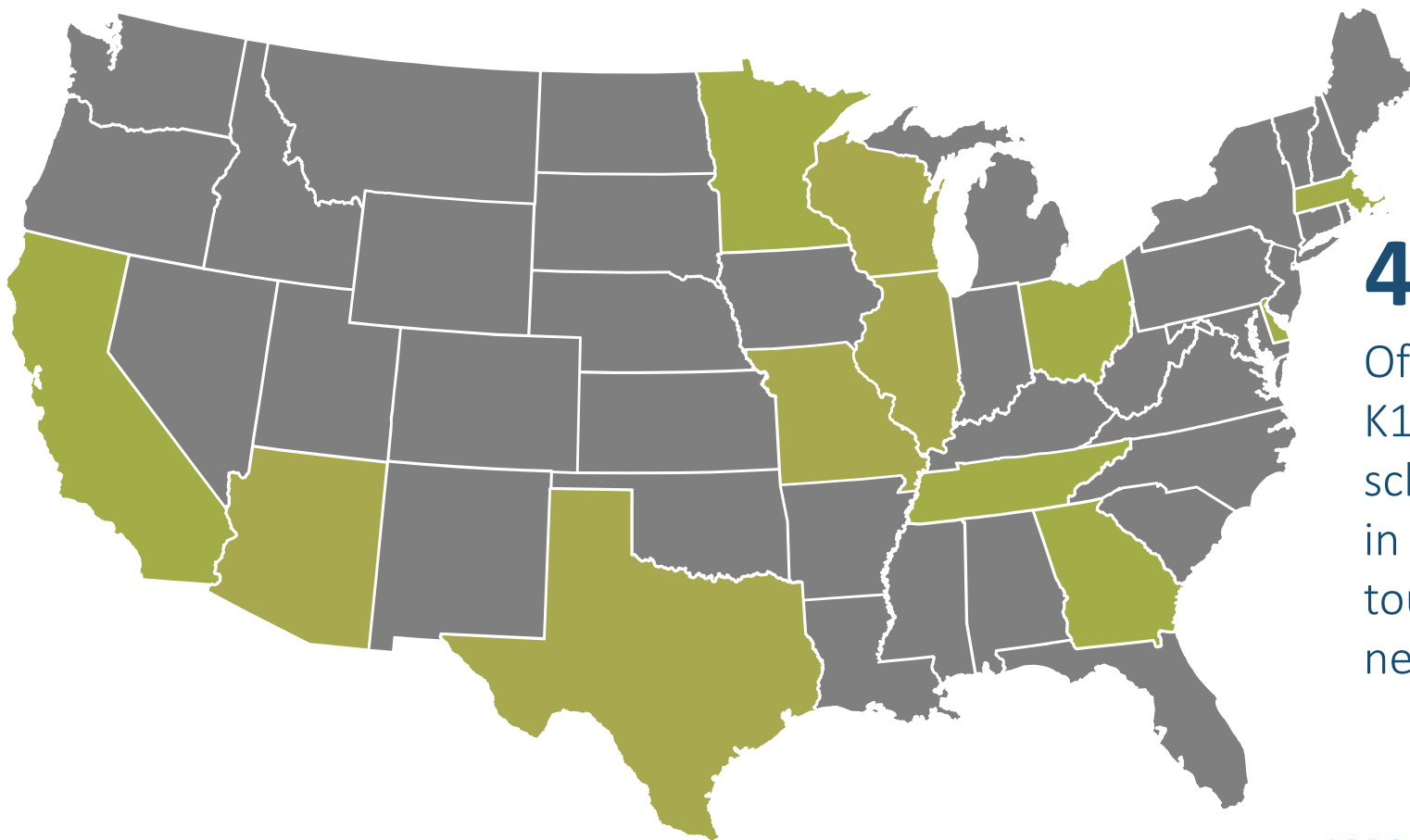
Youth WBL



JOBS FOR THE FUTURE

GROWING PATHWAYS TO PROSPERITY NETWORK

Twelve states with over 50 regions, rural to urban, serve as starting places for demonstrating success, with a focus on scaling grades 9-14 integrated academic and career pathways statewide.



46%

Of our nation's
K12 public
school students
in 12 states are
touched by the
network



JOBS FOR THE FUTURE

CONTINUUM OF EMPLOYER ENGAGEMENT IN YOUTH WBL

Least Intensive Engagement

- Guest speaker
- Company tours and field trips
- Job shadows
- Mock interviews

Moderately Intensive Engagement

- Service learning
- Class projects or challenges
- Mentorships
- Curriculum advising

Most Intensive Engagement

- Teacher externships
- Student internships
- Student capstones and assessments
- Convening and championing
- Apprenticeship



STATE STRATEGIES FOR WBL

- Cultivate highly visible employer champions
- Support and highlight districts actively involved in career development education and WBL
- Disseminate effective practices to other districts/regions
- Align education programs of study with state labor market needs and economic development priorities
- Use bully pulpit to emphasize that **all young people** (in K12, community college, four-year college, and beyond; liberal arts or technical studies) **are headed for a career, and that WBL matters**
- Education policies: extended learning time, credit for WBL, teacher externships



Incumbent Worker WBL



JOBS FOR THE FUTURE

JOBS TO CAREERS

- The Jobs to Careers (J2C) initiative was funded by the Robert Johnson Wood Foundation (RJWF) and the Hitachi Foundation, and managed by Jobs for the Future
- 17 sites across the country (allied health, long-term care, community health, and behavioral health)
- Tested work-based learning as a career advancement strategy. Formalized learning that occurred on the job
- 1,000 frontline health care workers:
 - 67% wage increase
 - 65% credential attainment



WORK-BASED COURSES

- Builds on J2C with a focus on manufacturing. Funded by National Science Foundation (NSF)
- An innovative way to bring college to the production line by using the job as a learning lab
- Key features:
 - Integrates the classroom and workplace by formalizing instruction that happens during work
 - Reflects the unique production needs of a company because teaching happens on the job
 - Fulfills program requirements for a community college certificate or degree

www.jff.org/workbasedcourses



BENEFITS OF WORK-BASED COURSES

- Community Colleges
 - Meet the needs of employers while maximizing value to students and maintaining academic standards
 - New student enrollment as gateway to certificate and degree programs
- Employers
 - Rigorous academic training for hard-to-fill positions
 - Tailored to their production processes and skill needs
 - Improve retention and loyalty among workers
- Students
 - Opportunity for career and educational advancement while working
 - Training immediately helps on the job
 - College credit and knowledge can be transferred across the industry



PRELIMINARY OUTCOMES

- JFF developed the model and piloted it with Owensboro Community Technical College in Kentucky, with funding from NSF
 - 115 students enrolled
 - 15 manufacturers participated including Aleris Corporation, Crop Production Services, Kimberly Clark, and Waupaca Foundry
- Interim outcomes of pilot
 - **27 courses** adapted, including in industrial maintenance, fluid power, PLC, machine tooling, welding, and blueprint reading
 - Work-based course students outperformed students in comparable traditional OCTC classes, with an **average GPA of 3.89 vs. 3.46**
 - Students earned an average of **11 credits**
 - **26%** of incumbent participants plan to go on to a degree. New workers have also enrolled as part of an 18-month A.A.S. degree
 - **62%** of students reported a promotion or new role and **57%** reported a wage increase in a post-course survey



OTHER FINDINGS

- Employers use work-based courses either to:
 - Better prepare workers for current jobs, or
 - As part of a strategy to develop talent for hard-to fill positions—this was correlated with more wage increases and promotions
- Supervisor training is critical: supervisors or other employer mentors were often uncomfortable with their role as instructors
- Selection of work-based course students was driven by employers, not college or course preparation

“As a peer mentor, one piece of my accountability is not only transferring that knowledge, but making sure I understand when they need to move to the next step.”

- Tim Sheldon, Organizational Effectiveness Specialist, Kimberly-Clark

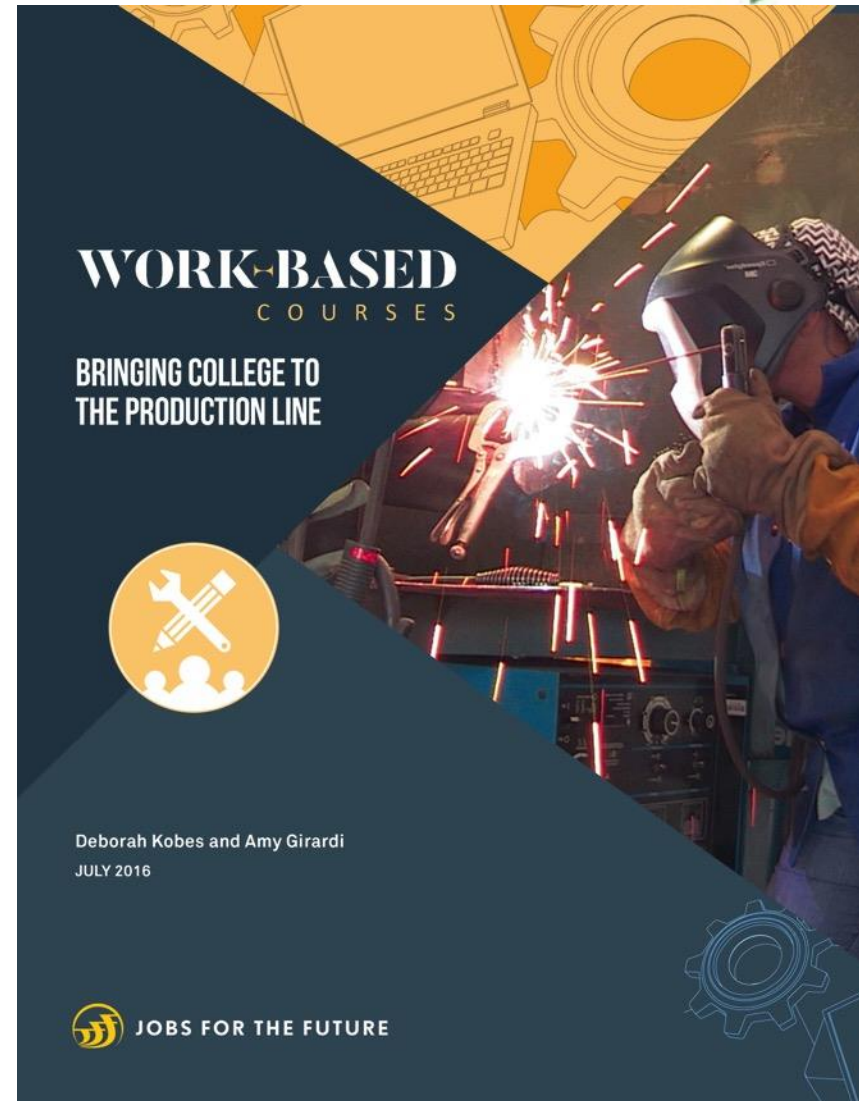


WORK-BASED COURSES

Read more about work-based courses, learn the six steps to implementation, and watch videos in an online toolkit:

www.jff.org/workbasedcourses

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IMT APPRENTICESHIP

- Industrial Maintenance Technician—stackable apprenticeship, easily adapted for different contexts, hybrid model (time-based and competency-based)
- JFF in partnership with AFL-CIO Working for America Institute, industrial unions, and regional intermediaries
- 164 registered apprentices to date
 - 26 apprentices achieved journey worker status
- Currently replicating in 8 states (WI, MI, MN, PA, KY, IN, OH and IL)
- USDOL H-1B and American Apprenticeship Grant funding



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